2016

The use of a self-affirmation intervention to increase the psychological help-seeking behavior of student Veterans

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by

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A thesis submitted to the graduate faculty

in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE

Major: Psychology

Program of Study Committee:
Nathaniel Wade, Major Professor
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Iowa State University

Ames, Iowa

2016

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ACKNOWLEDGMENTS

I would first like to thank Dr. Nathaniel Wade, my major professor, for all the support and guidance he has provided me throughout my time in graduate school. I feel very fortunate to be able to work with him on such a close basis. I would also like to thank Dr. David Vogel, Daniel Lannin, and Rachel Brenner, who have all been invaluable throughout this process.

Also, I would like to express my appreciation to Iowa State University, its Department of Psychology, and the greater Ames community for welcoming me and being supportive of my endeavors. The past two years have been everything I had hoped for and more. I am happy to call this place my new home. I would also like to thank Alex G. Your music has accompanied me throughout all parts of this process.

Most importantly, I would like to express my deep gratitude to my family for their love and support. I feel so lucky to have you in my life. You all serve as my beacons of strength. Thank you for always encouraging me to pursue my dreams and standing by me as I do. None of this would have been possible without you.

ABSTRACT

The self-stigma of seeking help is a significant barrier to utilizing mental health care services (Vogel, Wade, & Haake, 2006). Veterans may be particularly vulnerable to stigma, as seeking help violates the "warrior ethos" of the military, which holds values such as competence, emotional stoicism, and strength as sacrosanct (Skopp et al., 2012). Psychoeducational interventions are typically used to normalize counseling; however, information that suggests one may need mental health care can threaten an individual's self-concept. Research has shown that when people reflect on personal values, they can cope better with threatening information (Sherman & Cohen, 2006). This study tested a self-affirmation and psychoeducational intervention in 43 student Veterans enrolled at 8 undergraduate institutions in Iowa. Participants in the self-affirmation plus psychoeducation condition ranked their personal values and reflected on why they are important before being exposed to psychoeducational information about counseling that was tailored to Veterans. Participants in the psychoeducation-only condition solely viewed the educational information. It was hypothesized that participants in the self-affirmation group would experience less threat and more engagement with the counseling information, and in turn, demonstrate decreased self-stigma of seeking help, increased attitudes towards counseling, and increased intentions to seek counseling. Results partially supported the hypotheses, with the self-affirmation intervention leading to increased intentions to seek counseling.

Keywords: self-affirmation, self-stigma, stigma, help-seeking, Veterans, military

CHAPTER 1

OVERVIEW OF THE PROBLEM

In a given year, one in four American adults (approximately 61.5 million) will experience a mental illness (NIMH, 2013). Fortunately, many of these problems can be addressed in counseling; a comprehensive meta-analysis on psychotherapy, spanning across various theoretical orientations and issues addressed in treatment, has suggested that it is useful and effective (Wampold, 2015). However, less than 40% of people struggling with these mental health difficulties actually seek help (Kessler et al., 2001; Regier et al., 1993). On first glance, this underutilization may not appear to make sense. Given the high rates of suffering and the efficacy of treatment, why are people not utilizing available resources?

There are many barriers that prevent mental health care use: situational (e.g., provider availability), financial (e.g., too expensive), and perceptions of treatment inefficacy, among others. However, one barrier seems to emerge repeatedly that may be more powerful than all of the aforementioned hurdles: mental illness stigma. Both being diagnosed with a mental health disorder and seeking mental health care are stigmatizing (Ben-Porath, 2002). These stigmata, although related, are conceptually different and consist of different stereotypes, attitudes, and prejudices (Tucker et al., 2013).

The general public appears to endorse negative stereotypes towards the mentally ill (e.g., they are incompetent and unintelligent; Corrigan, 2004; Link et al., 2001). Specifically, those who seek treatment for mental health concerns are said to be weak and unable to handle their problems on their own (Vogel, Wade, & Haake 2006). These stereotypes and their impact may be even more prevalent within certain groups of society

that herald self-reliance, strength, and competence as core values. One particular group that may prize these values more than the general society is the military (Skopp et al., 2012). According to the U.S. Army's website (http://www.army.mil/values/warrior.html), their "warrior ethos" postulates that members will "always place the mission first, never accept defeat, never quit, [and] never leave a fallen comrade."

Wartime, known for its grueling challenges, has exposed military members to increasingly unique and difficult situations due to improvements in technology and warfare strategy (Nash, 2008; Church, 2009). When their service is over, our nation's Veterans must re-acclimate to civilian life, usually isolating them from their fellow Veterans in the process. Mental health concerns upon returning from active duty are common; up to 30% of personnel returning from Afghanistan and Iraq suffer from a diagnosable mental health condition (Hoge et al., 2004). However, even with their high rates of distress and exposure to traumatic events, they do not utilize mental health care at higher rates than the general civilian population. Hoge and colleagues (2004) found that among soldiers and Marines who met the screening criteria for major depression, generalized anxiety, or post-traumatic stress disorder, only 23% of those returning from Afghanistan and 40% of those returning from Iraq sought help. Furthermore, only 13% and 27% of these groups returning from Afghanistan and Iraq, respectively, sought help from a licensed mental health professional, usually more stigmatizing than talking to loved ones or a religious figure (e.g., priest, rabbi).

These low usage rates are alarming, given what is at stake for Veterans. However, given the warrior ethos and importance of resilience, it is not surprising that seeking help for mental health concerns may go against military culture (Nash, Silva, & Litz, 2009).

Of the military personnel who met screening criteria for a mental illness, 65% acknowledged that the fear of being seen as weak was a barrier to treatment, and 41% thought it would be too embarrassing (Hoge et al., 2004). Via treatment seeking, one is forced to acknowledge personal struggles, and thus, in the process, is labeled as "mentally ill" and/or a "help seeker." It has been hypothesized that when these labels are applied, stereotypes, prejudice, and discrimination tend to follow (Link et al., 1989). In order to avoid being labeled, individuals need only to not disclose personal difficulties or seek help. It is this label avoidance that may be of utmost importance in Veteran populations; this self-closeting enables Veterans to "save face," yet at the price of useful and potentially life-saving treatment (Ben-Zeev, Corrigan, Britt, & Langford, 2012; Corrigan & Matthews, 2003).

In order to address and improve help-seeking behavior within Veteran populations, it is important to understand the multiple variables at play. Military culture clearly plays a large role. Additionally, fear of treatment, comfort with self-disclosure, and anticipated utility of mental health care treatment (in addition to the social stigma and social norms) have been found to predict help-seeking behavior (Vogel, Wester, Wei, & Boysen, 2005). These findings provide evidence that interventions that seek to improve help-seeking behaviors should address many facets of mental health care.

Multiple approaches have been taken to reduce mental illness stigma. Most notably, these are protests, contact with persons with mental illness, and psychoeducation (Corrigan et al., 2001). Each intervention has attempted to improve attitudes towards the mentally ill and treatment seeking through myth-reduction, normalization, and general education. Although each has demonstrated unique strengths, none have emerged as

clearly powerful enough to reduce stigma and increase treatment-seeking behaviors (Mittal et al., 2012). One clear component missing from all these aforementioned interventions is the piece of "self" and how an individual is impacted when considering that they have a mental illness and need treatment.

Being presented with mental health information may be threatening, as it reminds the viewer of their personal difficulties and the possibility that they may need professional psychological help. Specifically, it can raise the possibility for military personnel that they are failing to meet military standards (Leary & Baumeister, 2000). Seeking treatment can provoke such self-referencing stereotypes as, "I am a pitiful soldier" (Ben-Zeev et al., 2012, p. 267). Therefore, considering treatment may be damaging to one's self-esteem and global self-system, which is an internal guiding force that enables people to maintain a positive view of themselves (Vogel, Wade, & Hackler, 2007; Steele, 1988).

According to Steele's (1988) self-affirmation theory, individuals seek to maintain this self-system through the conservation of positive beliefs that they are adequate, competent, and stable. When an aversive stimulus (e.g., mental health information) provokes feelings of inconsistency (e.g., seeking help as a Veteran), the self-system is threatened. As a result, people tend to react with defensiveness or avoid the information in order to maintain internal psychological consistency (Steele, 1988; Sherman & Cohen, 2006). Steele (1988) proposes that if an individual can bolster their self-system by affirming himself or herself in a non-threatened domain, they will be able to handle threatening information without endangering their self-system. For Veterans, these non-

threatened domains can be ones comprised of values not directly related to perceptions of emotional self-sufficiency or other aspects of military culture (i.e., love, creativity).

Self-affirmation interventions usually ask participants to rank their personally important values and then write about how their highest-rated one brings meaning and happiness to their life. Through this mechanism, individuals are given the chance to think about their strengths and admirable characteristics more than they may do in everyday life. Only after they are given ample time to affirm their selves are they presented with the threatening information. Research has demonstrated that engaging in a self-affirmation task leads to reduced avoidance of threatening health information and increases openness to other viewpoints (Howell & Shepperd, 2012; Cohen, Aronson, & Steele, 2000). Physiological research on its effects has shown that these interventions lead to a reduced startle-eyeblink response, a basic defensive reaction to aversive stimuli, suggesting that it taps into more "core" processes (Crowell, Page-Gould, & Schmeichel 2015). Ultimately, this may allow for increased engagement with the presented material.

In the efforts of applying this theory to help seeking, Lannin, Guyll, Vogel, and Madon (2013) had college undergraduates self-affirm by writing and reflecting about their important values before being presented with an article describing psychotherapy (a highly stigmatized and potentially threatening process) and its benefits. The authors found that those who completed this task demonstrated reduced self-stigma for seeking help, which indirectly increased willingness to seek psychotherapy. Given the promise shown by previous research, the question must be asked: can a self-affirmation intervention also reduce avoidance of mental health information for Veterans, for whom it may be especially threatening, enough to increase psychological help seeking?

CHAPTER 2

LITERATURE REVIEW

Goffman (1963) provided a pivotal conceptualization of stigma as resulting from when an individual has an attribute that reduces them "from a whole and usual person to a tainted, discounted one" (p. 3). Historically, stigma referred to a physical process. Socially undesirable individuals were cut or burned to produce bodily symptoms that literally branded them with a mark of shame as a way to portray membership in disgraced groups (e.g., slaves, criminals, traitors; Hinshaw, 2007) and signify something "unusual and bad about the moral status" of the group (Goffman, 1963, p. 1).

Eventually, the term stigma came to be used for any mark of disgrace. This certainly included external, visible signs that indicated a person was of a particular, shunned group. However, it also included marks of shame that a person might internalize. Both external and internal marks of shame are particularly relevant for people with mental illness. From the ancient practice of carving circular holes into human skulls to assist in the discharge of evil spirits to the eighteenth and nineteenth centuries, when mental asylums were used as human zoos for the public to witness chained people, western society has attempted to label and separate themselves from the mentally ill (Hinshaw, 2007).

Now, in the United States, stigmatizing reactions to those with a mental illness manifest less in physical terms and more in psychological reactance. However, this transition in reactions does not free the stigmatized group from the considerable impact of stigma, which Corrigan (2004), in his review of the literature, presents as being associated with poor mental health, status loss, discrimination, social distancing,

difficulty obtaining and maintaining employment, difficulty in acquiring safe housing, and increased arrest rates (Link, 1987; Link & Phelan, 2001; Farina & Felner, 1973; Aviram & Segal, 1973; Teplin, 1984).

In order to understand the negative effects of stigma and the mechanisms through which stigma operates for those with mental health concerns, it is first important to delineate the four foundational types of stigma related to mental health: (1) public stigma of mental illness, (2) self-stigma of mental illness, (3) public stigma of psychological help seeking, and (4) self-stigma of psychological help seeking (Corrigan & Watson, 2002; Vogel et al., 2006; Tucker et al., 2013). According to Corrigan and Watson (2002), public- and self-stigma have the same three main components: stereotype, prejudice, and discrimination. These components, respectively, are composed of primarily cognitive, cognitive and affective, and behavioral reactions (Corrigan & Watson, 2002).

Defining Stigma

Public stigma of mental illness and help-seeking. The public stigma of mental illness is the societal perception that people with a mental illness are inferior to, different than, and should be separate from "normal" people. The public stigma of seeking help is similar to the public stigma of mental illness, although the mark of disgrace is not about having a mental illness; it is simply the act of seeking psychological help. Both of these concepts are rooted in stereotypes. Stereotypes, or negative beliefs about a group, are typically triggered by cues affiliated with the stereotyped group; for the mentally ill, these may be poor social skills or odd physical appearance (Corrigan & Watson, 2002; Corrigan, 2004; Corrigan, 2000). As social stereotypes are perceptions that are agreed upon among groups, they serve as heuristics for categorizing people and making

judgments (Corrigan, 2004; Hamilton & Sherman, 1994). Once these differences are conceptualized, identified, and linked to the mentally ill or to those who seek help, individuals may engage in social distancing and create a dichotomization between "us" and "them" (Link & Phelan, 2001).

Prejudice, the cognitive and affective component of stigma, consists of agreement with a stereotype and the negative emotional reaction resulting from general attitudes toward a group (Corrigan & Watson, 2002). Unlike stereotypes, prejudice also includes an evaluative component (Allport, 1954; Eagly & Chaiken, 1993). According to Corrigan and Penn (1999), people who endorse stereotypes of the mentally ill acknowledge three themes surrounding them: (1) fear and exclusion: the mentally ill are dangerous and should be kept out of communities (2) authoritarianism: individuals with severe mental illness cannot be held responsible for themselves and need others to make important decisions for them; and (3) benevolence: people with severe mental illness are juvenile and need someone to take care of them (Brockington, Hall, Levings, & Murphy, 1993; Taylor & Dear, 1980).

Ultimately, these reactions lead to discrimination, which is the behavioral response to prejudice (Crocker, Major, & Steele, 1998; Corrigan & Watson, 2002). Discrimination tends to manifest itself against people with a mental illness or who seek help in a variety of ways, mostly via social distance and status loss (Link et al., 1989). Stigma can lead to negative judgments about these individuals as a potential friend, partner, neighbor, or coworker (Link et al., 2001). Individuals who have a mental illness are seen as less "human" and more dangerous than their non-ill counterparts (Martinez, Piff, Mendoza-Denton, & Hinshaw, 2011).

Self-stigma of mental illness and help-seeking. Whereas stereotypes, prejudice, and discrimination are established and shared in the public domain about people with mental illness and those who seek help, these three components can also develop within the individual. In other words, exposure to public stigma may lead a suffering individual to internalize stigma via personal agreement with and endorsement of these beliefs. That is, "the stigmatized individual tends to hold the same beliefs about identity that we do; this is a pivotal fact… The standards he has incorporated from the wider society equip him to be intimately alive to what others see as his failing" (Goffman, 1963, p. 7).

With this acceptance, an individual may develop self-stigma, or a reduction in self-esteem or self-value resulting from the belief that they are socially unacceptable or undesirable (Corrigan, 2004; Vogel, Wade, & Hacker, 2007). According to Bathje and Pryor (2011), both awareness and endorsement are required for self-stigma to develop. This finding is critical for intervention purposes (to be discussed later in this chapter). Once the process of endorsement begins, internalization of a new, negative identity can occur and its impact may begin to emerge.

Given the prominence of mental illness stigma, many people with a mental disorder are aware of the negative stereotypes surrounding this aspect of their identity (Bowden, Schoenfield, & Adams, 1980*)*. Vogel, Bitman, Hammer, and Wade (2013) found that higher perceptions of public stigma of seeking help predicted higher levels of self-stigma of seeking help. Lannin, Vogel, Brenner, and Tucker (2015) expanded on this finding with their Internalized Stigma Model, which demonstrated that both mental illness stigma and the stigma of seeking help can be internalized, demonstrating the deleterious range of its impact.

If the public stigma of mental illness (e.g., the mentally ill are frightening and should not be part of normal society) is believed, an individual may develop negative self-referential thoughts that they too are dangerous, volatile, and deserve to be ostracized (i.e., "I am crazy and can't control myself, so I'm not going to go out in public because I might hurt someone.") It is beliefs like this that make up the self-stigma of mental illness and results in self-discrimination, which consists of behavioral reactions (i.e., limiting contact with others) towards oneself as a result of the internalization of prejudice and stereotypes about the mentally ill (Corrigan, 2004).

Likewise, pursuing mental health care may lead to self-identification as a "help-seeker" (Vogel & Wade, 2009). If someone agrees with the stereotype that there is a social stigma for seeking help or that it is a sign of inadequacy to see a psychologist to address emotional struggles, they become vulnerable to self-prejudice, which is the internalization of societally endorsed prejudice; essentially, self-prejudice is prejudice towards oneself (Corrigan, 2004). As there is a stigma that people who seek help cannot control their emotions, a help-seeker may label themselves along these lines, i.e., "I sought help, so I am weak and unstable" (Oppenheimer & Miller, 1988).

Importance of the Self-Stigma of Help-Seeking

Modified labeling theory (MLT) proposes that perceptions of how society devalues people with a mental illness get turned inward when labels associated with mental health increase in self-salience (Link et al., 1989). Anticipating the harmful effects of labeling, people may avoid routes through which they may be identified as "mentally ill" or as a "help-seeker" by not disclosing distress or seeking help. According

to Ben-Zeev and colleagues (2012) this form of label avoidance may be the most significant way that stigma impairs help seeking (Corrigan & Matthews, 2003).

Accepting this label and the stereotypes that accompany it affects (but is not limited to) a large set of variables: suicide risk, coping, social interaction, vocational functioning, and symptom severity (Yanos, Roe, & Lysaker, 2010). As these negative beliefs are continuously endorsed, it is common for those impacted to experience reductions in self-esteem and self-efficacy (Vogel et al., 2007). With this, individuals may find themselves impaired by the "why try?" effect, raising questions about the efficacy of even attempting to get better (Corrigan, 2004; Corrigan, Larson, & Rüsch, 2009). Multiple studies have illuminated the relationship between self-stigma, reduced self-esteem and diminished hope (Watson et al., 2007). Self-stigma of seeking help combined with an impaired belief that things can get better may reduce help-seeking intentions (Vogel et al., 2013). Ultimately, symptomatology may not be properly addressed, leading to increased symptom severity and frequency, occurrence of relapse, and distress levels (Corrigan, 2004).

The self-stigma associated with seeking mental health care clearly plays a crucial role in the help seeking process itself. Bathje and Pryor (2011) found that self-stigma fully mediated the relationship between public stigma awareness and attitudes towards counseling. It is self-stigma, or the manifestation of negative self-thoughts, that leads to reduced consideration of help-seeking, rather than just being aware of the stigma towards counseling. Additionally, the self-stigma of seeking help has been shown to uniquely predict attitudes towards and willingness to seek mental health counseling (Vogel et al., 2006; Vogel et al., 2007). In a model proposed by Vogel and his colleagues (2007), self-

stigma of seeking help and attitudes towards seeking psychological help were demonstrated to be unique mediators of the relationship between public stigma and willingness to seek help. Furthermore, self-stigma was a more proximal predictor of attitudes toward and willingness to seek counseling than was public stigma, suggesting that this is the more important variable in the process of keeping people from seeking the help that they need.

Thus, help-seeking stigma may be important for helping to explain why over 50 percent of people who are deemed eligible to seek help for a psychological problem ultimately do not (Kessler et al., 2001; Regier et al., 1993). This is despite the fact that decades of psychotherapy research have shown that psychotherapy is an effective way to deal with most mental health concerns (Smith, Glass, & Miller, 1980; Wampold, 2015). Given the effectiveness of counseling and the significant number of people who need it, why do people not seek help? Kessler and colleagues (2001) found that almost 1 in 4 of the individuals acknowledged that a concern about what others might think was a significant barrier to seeking help. Additionally, 70 percent indicated that they wanted to solve the problem on their own. Combined, these results indicate that there is a significant barrier to help seeking that extends beyond merely the availability and effectiveness of treatment: the social stigma and its implications.

Whereas the self-stigma of seeking help has shown a strong, pervasive effect in general western samples, it may be even more powerful within certain populations due to cultural norms, which exacerbate and compound the already-existing stigma. One group in particular that may be especially vulnerable to the impact of mental health stigma is the military and its personnel.

Stigma in Military and Veteran Populations

In order to meet the demand necessary for Operation Enduring Freedom (OEF) and Operation Iraqi Freedom (OIF), a massive base of military reservists was called up to active duty. As the war eventually wound down, many soldiers were sent back home. According to the 2010 census, there are approximately 21.8 million Veterans in the United States alone (U.S. Census Bureau, 2012), and almost 1 million enrolled in higher education between 2002 and 2010 (Cate, 2014). These returning service members represent a new breed of Veterans. Already, war puts military members through long periods of physical, cognitive, emotional, social, and spiritual challenges (Elliott, Gonzalez, & Larsen, 2011; Nash, 2008). Now, as military technology and warfare strategy has advanced, wartime difficulties have become increasingly unique.

It is an unfortunate reality that Veterans are increasingly in need of mental health services. Hoge and colleagues (2004) found that up to 30% of soldiers and Marines returning from Afghanistan and Iraq suffer with mental health problems. As of 2009, soldier suicide rates were at the highest they have been in three decades (Jelinek, 2009). In order to assess prevalence rates, Seal and colleagues (2009) analyzed the records of 289,328 OEF/OIF Veterans who obtained mental health care from the Veterans Affairs for the first time after serving. From 2002 to 2008, for those who sought healthcare from the Veterans Administration (VA) for the first time, rates of depression increased from 2.3% to 17.4% and PTSD rates increased from 0.2% to 21.8% (Seal et al., 2009). It is important to note that these data represent only those who sought help; clearly, there are more Veterans suffering from diagnosable mental health conditions who are not seeking help. For example, a large national survey of OEF/OIF Veterans found that nearly half of

those who screened positive for probable PTSD or major depression did not receive any mental health care in the past year (Schell & Marshall, 2008). So, although Veterans' mental health needs are increasing, they are not seeking treatment at a corresponding rate. It is likely that self-stigma associated with both mental illness and help-seeking are at work. In fact, there may be elements of the military culture that exacerbate and reinforce the stigma.

Maintaining one's unit is crucial in the military. Those in the military rely on each other for physical and emotional support and safety both on and off the battlefield; members typically refer to their peers as family (Ove, 2010). In order to foster solidarity, the military has traditionally defined itself by a core set of values rooted in the concept of the warrior. Skopp and colleagues (2012) suggest that the military is characterized via its "warrior ethos," which promotes a culture that values emotional stoicism, self-sufficiency, and strength as sacrosanct. In addition, there is a strong group identity. A warrior culture enables its recruits to fight wars by training them to turn their emotions off and seeks to foster "an intimacy based on sameness" through these shared physical and emotional experiences (Demers, 2011, p. 162). These principal values are foundational and core to the organization and its members. Given their prominence and ubiquity, in addition to the value placed on unit cohesion, an individual's self-esteem will become attached to both their unit and the military's tradition and reputation (Church, 2009).

Given the emphasis that the military's cultural mores place on self-sufficiency and strength, it may be particularly at risk to shifting responsibility for mental health problems onto the people suffering from them (Vogt, 2011). Veterans, when reminded of

their own struggles, may be reminded of their "failures" and engage with military stereotypes of mental illness. This increases their vulnerability to feeling that they are less competent or disciplined than they should be, leading to internalized anger, low self-esteem, and depression (i.e., "How can I be a proud Veteran if I can't even control my own emotions?") (Corrigan & Watson, 2002). In order to avoid having to confront these stereotypes, Veterans can evade identification with the concept of mental illness by not discussing their symptoms or seeking help.

Research has shown that the impact that an event has on one's self-esteem may relate to how much it is associated with an individual's self-concept (Crocker & Wolfe, 2001). In the military, a large amount of self-esteem derives from upholding the warrior ethos. In order to develop the close bonds among the unit, behaviors consistent with the "ideal warrior" must be exhibited. Individuals who act consistently may appear more predictable, and thus, favorable (Cross, Gore, & Morris, 2003). Behaviors that violate these core values are highly stigmatized. Therefore, seeking psychological help, which is conceptualized as an act of weakness, may be framed as a rejection of the military's fundamental values.

It is no surprise, therefore, that Stecker and colleagues (2010) found that the fear of being labeled as someone with mental health problems was a worry for nearly three quarters of OIF Veterans. Additionally, 44% of OEF/OIF Veterans with psychological problems said that pursuing mental health care would make them feel down on themselves (Elbogen et al., 2013). As personal mental health concerns exacerbate, stigma becomes more salient. This is dangerous, as those in need of help may be the ones most likely to avoid it. Hoge and colleagues (2004) found that soldiers and Marines meeting

screening criteria for a mental health problem were twice as likely to report worries about stigma and other barriers than those not meeting screening criteria. Disclosing distress or seeking help may make a person appear to endorse and embody a devalued characteristic, which threatens unit cohesion and decreases feelings of trust in the individual in combat but also as a support system (Coll, Weiss, & Yarvis, 2011; Church, 2009; Corrigan & Watson, 2002; Chapman, 2014). Chapman and colleagues (2014) found that common fears for seeking treatment were related to their unit (e.g., unit leadership may treat them differently, unit would have less confidence in them, they would be seen as weak), confidentiality, and career concerns (e.g., a documented history of help-seeking would harm their career).

Not all of these concerns are unfounded; there are real implications for seeking help in the military. Research has found that disclosing one's mental health status can lead to differential treatment by unit leadership or even being denied certain duties or promotions (Gould et al., 2010; Dickstein, Vogt, Handa, & Litz, 2010). Given these risks, it is no surprise that those in the military are more uncomfortable discussing psychological problems than medical problems after deployment, and are less likely to follow through with a mental health referral than they are with a medical one (Britt, 2000). Clearly, military culture and its associated stigma present a prominent barrier to mental health care. The self-stigma of seeking help is also important once people decide to seek out counseling. Evidence suggests that those with more stigmatizing attitudes about help-seeking tend to have poorer treatment adherence (Sirey et al., 2001). However, it is important to note, as mentioned earlier, that merely being aware of public stigma and its labeling effects do not lead to self-stigma; rather, individuals must also

endorse said stigma (Corrigan & Watson, 2002; Bathje & Pryor, 2011). It is upon this framework that attempts have been made to interrupt the development of self-stigma and promote help seeking among those who are in need.

Interventions to Reduce Stigma

Given the growing evidence that stigma may cause many people to avoid treatment who could otherwise benefit from it, psychologists have focused their efforts on reducing the insidious impact of self-stigma. Because self-stigma has been demonstrated to be the internalized impact of public stigma (Vogel et al., 2013), it is important to both focus on reducing public stigma before it leads to self-stigma. Corrigan and colleagues (2001) classified three prominent approaches that are used to reduce mental health stigma: protest, contact, and education. *Protest* interventions consist of active attempts to counter the negative stereotypes and prejudices that the public has towards people with a mental illness (Greene-Shortridge, Britt, & Castro, 2007). This is typically done through education about how to recognize and reject the ways that people with mental illness are portrayed (Corrigan et al., 2001). *Contact* consists of fostering interactions between the general public and people with mental illness. Ideally, individuals with mental illness would reduce stigma in the general public by demonstrating that they too can hold jobs, live as good neighbors, and be interpersonally skilled. Finally, education (hereafter referred to as "psychoeducation") is used to primarily inform individuals about the help-seeking process and facts about treatment via websites, videos, and brochures. The interventions may also attempt to dispel mental health myths to reduce stigma and improve attitudes.

Corrigan and colleagues (2001) contrasted the effects of these three approaches on both mental illness (depression, psychosis, cocaine addiction, mental retardation) and physical illness (cancer, AIDS). The authors also assessed beliefs about controllability (who is to blame for the problem?) and stability (can this condition benefit from counseling and/or medicine?).

Results revealed that the education condition, which consisted of participants learning about common myths about mental illness, which were then refuted by facts, had a broad impact, leading to significant changes in stability attributions about all conditions besides cancer, thus having its desired impact on all four psychiatric groups. This suggests that improved knowledge about mental illness leads to more flexible beliefs about recovery potential. However, controllability was less affected by education, implying that stereotypes about who is to blame for the illness are less malleable. The contact condition, which required participants to listen to a talk by a symptom-free person with a history of mental illness, resulted in significant change. Participants in this condition exhibited improved attributions about both the controllability and stability of depression and the stability of psychosis.

Additionally, only contact participants recalled more positive information about the life story of an individual with mental illness, which was presented after the specific intervention. The protest condition, which had participants learn about stigmatizing attributions towards the mentally ill and then were instructed to condemn these attitudes led to no significant changes in the controllability or stability beliefs of any condition. Protest has been implicated in causing reactance and stigma exacerbation in the general population (Corrigan et al. 2001; Corrigan & Penn, 1999; Corrigan, 2004).

In an attempt to provide information on the current state of research, Mittal and colleagues (2012) conducted a comprehensive review on interventions that specifically were targeted at self-stigma and found two main approaches to reducing its impact: (1) interventions that are designed to restructure self-stigmatizing beliefs and (2) interventions that seek to foster skills for dealing with self-stigma (e.g., bolstering self-esteem, empowerment). The approaches, although related in goals, differ greatly in their content. Most commonly, interventions were rooted in psychoeducation or psychoeducation combined with cognitive restructuring. Delivering accurate information via psychoeducation is important, as perceptions about treatment success have been demonstrated to mediate the relationship between stigma and treatment seeking (Penn et al., 2005). This is a pivotal finding with massive implications; if potential mental health care consumers can learn more about how effective treatment actually is, it is feasible to greatly reduce the self-stigma of seeking help.

Most frequently, psychoeducational interventions are delivered in a group format. A video intervention administered in a rural school over a 3-day period by Esters, Cooker, and Ittenbach (1998) resulted in individuals developing more favorable attitudes towards seeking professional psychological help and stronger alignment of their understanding of, and opinions about, mental illness with mental health professionals. It is significant to note that this change was still present at the study's endpoint 12 weeks later. Although improved attitudes towards help seeking and a better understanding of mental illness are both laudable outcomes, it is the translation to actual help-seeking behaviors that is ultimately desired. Sharp, Hargrove, Johnson, and Deal (2006) attempted to address if a brief psychoeducational intervention could increase the

frequency of these behaviors. A 40-minute intervention consisted of informing participants about community resources and stigma. Additionally, it explained the therapeutic process, treatment efficacy, and explained differences between mental health professionals. Participants who completed the intervention reported an increase in positive attitudes towards seeking help and a decrease in stigmatizing perceptions of those with a mental illness. However, these participants did not report more frequent help seeking behavior, nor was there a difference in the number of peers they referred to seek help.

As experiences with mental illness and help seeking vary based on many factors (e.g., age, gender, religious beliefs, cultural beliefs), psychoeducational interventions may operate more effectively if they are custom-tailored to the intended population. In order to better address help seeking specifically with men, the National Institute of Mental Health established "The Real Men. Real Depression." (RMRD) project. Hammer and Vogel (2010) compared three psychoeducational brochures: the RMRD brochure, a gender-neutral brochure (Rochlen et al., 2006), and one created for the study (a "male-sensitive" brochure). In the male-sensitive brochure, the authors defined depressive symptoms and counseling in more "masculine" language (e.g., framing therapy as a solution-focused "strategy for attacking depression," p. 301). Additionally, the medical-model was elicited as a way to reduce feelings of blame and stereotypically masculine-looking men were utilized for testimonials. The male-sensitive brochure led to significantly greater attitudes towards professional help seeking compared to the RMRD brochure, but not the gender-neutral brochure. Additionally, the male-sensitive brochure was the only intervention that produced significantly greater reductions in the self-stigma

of seeking help. This demonstrates the promise of tailoring interventions to specific populations.

With the goal of cultural sensitivity in mind, Alvidrez, Snowden, Rao, and Boccellari (2009) created a psychoeducational booklet entitled: "Getting Mental Health Treatment: Advice from People Who've Been There." The information from the booklet was based on interviews with African-American clients. The booklet consisted of information consumers wished they knew before seeking treatment, challenges they faced involving treatment entry and adherence, and advice about how to make treatment more effective. Participants who received the booklet that either indicated a higher perceived need for treatment or were more initially uncertain about what treatment looks like exhibited more reductions in stigma compared to those in the control condition who only read a brochure about available services. This suggests that psychoeducation may be effective in reducing stigma for those in need of actual services through the facilitation of treatment acceptance (Daley & Zuckoff, 1998). For those unsure about what mental health care looks like, the educational component may reduce uncertainty by improving treatment knowledge (Acosta, Yamamoto, Evans, & Skilbeck, 1983*)*. Although these results are promising, there was no significant impact on actual help-seeking behaviors.

Although psychoeducational interventions are the most common way to address the self-stigma of seeking help, their outcomes invite room for improvement. Out of the nine studies included in the literature review by Mittal and colleagues (2012) that employed psychoeducation as a primary strategy, only five yielded a significant decrease in self-stigma levels. Additionally, only three of these studies reported a Cohen's d above .5. One concern surrounding the use and meta-analytic view of psychoeducational

interventions is that there is great variability in the literature concerning their methodology that makes related studies not directly comparable (Mittal et al. 2012). For example, different definitions of self-stigma impact study design, implementation, outcomes, and interpretation; nine of the fourteen articles reviewed did not have an intervention based on a conceptual model of self-stigma.

Additionally, these interventions actually may create a "rebound" effect, leading to increased recall of negative stereotypes (Corrigan, 2004). This could be because they disempower people, as mental health information reminds someone of his or her struggles, threatening one's self-concept (Rappaport, 1987). Although psychoeducation, when used alone, may not be as effective as would be desired, findings regarding its usefulness do provide a foundation for future research, which should be as tailored as possible to the population (Hammer & Vogel, 2010). As previously discussed, Veterans are a group that could be effectively addressed, given their mental health concerns yet underuse of available services.

Relatively little intervention-based research has been conducted on ways to encourage help seeking specifically in Veterans. Adler and colleagues (2009) conducted BattleMind Training (small- and large-group), BattleMind Debriefing, and stress education interventions on 2297 US soldiers returning from 1-year deployment to Iraq. Battlemind Training is a cognitive and skills-based approach that educates returning soldiers about the transition to civilian life by reframing difficulties and reinforcing adaptive cognitions (e.g., PTSD, depression, and loss of sleep as natural consequences of deployment). Battlemind debriefing encourages emotional discussion about hardships during the war and focuses on the transition home as a social-psychological task.

Participants who had high levels of combat exposure and completed Battlemind debriefing, compared to stress education groups, had less posttraumatic stress, depression, and sleep issues (Adler et al., 2009). For personnel who had high levels of combat exposure, large-group Battlemind Training led to lower stigma levels compared to stress education (Adler et al., 2009).

Although there was no clear "best" intervention, it is possible that what separated large-group Battlemind training and Battlemind debriefing from stress education was that it enabled Veterans to see that their peers struggled with similar problems, thus normalizing difficulties and facilitating increased rapport among platoons through shared experiences. Through this mechanism, Veterans struggling with mental health difficulties may have avoided feeling like an "other" among their peers, reducing blows to their self-esteem by mitigating concerns of potential ostracism for disclosing their struggles. Therefore, providing an environment in which Veterans can maintain their self-integrity while exploring mental health concerns may be crucial for increasing help-seeking among this population.

Given their unique experiences shaped by military culture, experiences with war, and the transition home, it is apparent that Veterans are in further need of custom-tailored interventions that are sensitive to the meaning and impact of help-seeking. Mental health psychoeducation may be especially threatening to Veterans compared to civilian populations because of the stereotypes associated with mental illness. Being presented with this information can make their psychological distress and its apparent inconsistency more immediately salient, evoking concerns about negative reactions from others (Greene-Shortbridge et al., 2007; Vogt, Fox, & DiLeone, 2014). As these concerns are

activated, Veterans may disengage from or derogate the threatening information (e.g., mental health brochures, psychoeducational videos) to avoid exacerbated stress and damage to their self-esteem (Crocker, Major, & Steele, 1998*)*. As a result, although they may reduce exposure to information that threatens their self-integrity, they will also concurrently reduce engagement with material that could direct them towards mental health resources that could alleviate their symptomatology and increase their quality of life.

However, psychoeducation may not always evoke strong defensive reactions. Research has demonstrated that maintaining perceptions and feelings of empowerment help increase tolerance of stigma, leading to more positive attitudes towards help seeking (Ting & Hwang, 2009). By enabling individuals to maintain their self-esteem when encountering threatening mental health information, they may respond less negatively if they do not subsequently identify wholly with the "mentally ill" label or with the broader, and highly stigmatized group, of people with mental illness (Corrigan & Watson, 2002). Therefore, it is possible that Veterans may benefit from a help-seeking intervention that bolsters their self-concept, empowers them, and reduces global identification with the stereotypes of the "mentally ill" and "help seekers," thus allowing them to maintain their self-esteem and engage more fully with psychoeducational information.

Self-Affirmation Theory and Help-Seeking

In his seminal paper on self-affirmation theory, Steele (1988) proposes that all individuals have a "self-system that essentially explains ourselves, and the world at large, to ourselves" (p. 262). This system is responsible for enabling us to "maintain a phenomenal experience of the self –self-conceptions and images-as adaptively and

morally adequate, that is, as competent, good, coherent, unitary, stable, capable of free choice, capable of controlling important outcomes" (p. 262). Information that threatens these beliefs can be seen as attacking or aversive, thus invoking defensiveness reactions (e.g., rejecting, distorting, or denying the information) so that we can restore our self-worth (Sherman & Cohen, 2006).

For example, consider an individual who greatly relies on a self-concept defined by resilience, self-sufficiency, and the thought that "it could always be worse." Now, imagine that this person is distressed and showing signs of depression. Learning that they have depression may threaten the idea that they are psychologically healthy and evoke internal psychological inconsistency and dissonance. In order to not have to consider this possibility, individuals may avoid behaviors that could put this self-concept into question (i.e., looking up symptoms of depression, taking a depression screening, talking to a counselor). One's self-integrity is challenged by this inconsistency, as it implies failures (both perceived and real) to align with cultural and social values (Leary & Baumeister, 2000). However, this information, due to its utility, should not be ignored. Although avoiding threatening information may serve an ego-protective function that allows an individual to avoid confronting a problem, it does not lead to behavioral changes, thereby not truly serving a corrective function. Until self-affirmation theory was introduced, in order to achieve internal equilibrium, inconsistencies were said to require rationalization, attitudinal or behavioral change, or a diminishing in importance (Festinger, 1957).

Self-affirmation theory postulates three pathways through which an individual is able to maintain this phenomenal experience of the self when faced with threatening information (Sherman & Cohen, 2006). The first route (labeled the "*accommodation*

pathway") is taken when a person accepts their perceived failure or recognizes the threatening information as truthful, leading to changes in attitudes and behaviors that allow for realignment with recognized standards. However, accepting information or failure may be too dangerous if it concerns a key part of one's identity. The second route (labeled the "*defensive pathway*") entails attempts at reducing the apparent threat. This approach can be acceptance-oriented (retaining the core information of the threat, yet reframing it) or defensive (attempts to dismiss, avoid, or deny the threat). The third and final route (labeled the "*self-affirmation pathway*") is unique in that it allows for both self-system maintenance and change. Via this pathway, an individual can begin or continue with an inconsistent behavior if he or she is able to engage in an affirmation that provokes the emergence of other valued self-concepts.

In order to promote the self-affirmation pathway, individuals typically engage in a "self-affirmation task." In such tasks, participants usually rank their values and characteristics (e.g., bravery, creativity, strength) in terms of personal importance, and then write and reflect upon times when they employed these admirable qualities or why they are important to them. By doing this, other important personal strengths are invoked that are highly salient to an individual. It has been hypothesized that these tasks may allow people to transcend self-image concerns (Crocker, Niiya, & Mischkowski, 2008). As a result, an individual's self-system is bolstered, placing the threatening inconsistency in an overall context of one's other "good" characteristics, thus reducing its threat and impact and facilitating self-system maintenance (i.e., "I am a loving partner and son, and it may help me to see a counselor for help with my depression"). Through reflection on valued self-concepts not directly under threat, the need to defend is reduced.

In order to develop interventions that facilitate the self-affirmation pathway, it is important to understand variables that it interacts with. Overall, many variables are at play, usually falling under the umbrella of cultural, individual, and situational differences (Sherman & Cohen, 2006). Members of individualistic cultures (e.g., North American) have been found to benefit more from independent self-affirmation writing tasks (e.g., why a certain value is important to them) compared to those from collectivist cultures (e.g., East Asian) who benefit more from interdependent self-affirmation writing tasks (e.g., why a certain value is important to family, friends, or others; Hoshino-Browne et al., 2005).

On an individual level, self-esteem and how important the domain threatened is to one's identity have both been widely considered to be important moderators of self-affirmation interventions (Sherman & Cohen, 2006). Aronson and Mettee (1968) discuss the self-consistency view, which suggests that people with high self-esteem may be more impacted by their inconsistent actions than those with low self-esteem, as these negatively perceived actions may represent a larger threat via magnification of an apparent discrepancy. In their study, they found that individuals who were given false-feedback via a personality inventory and made to believe that they had many positive attributes (high self-esteem condition) were less likely to cheat in a blackjack game than those who were told that they had an "unstable personality" (low self-esteem condition). In their discussion, the authors suggest that individuals who have a less favorable self-concept are more likely to engage in behaviors consistent with low self-esteem. If invoking negative self-referents can lead to less incongruence with unvalued behaviors, can invoking positive self-concepts increase the frequency of positive behaviors?

According to the affirmational resources view proposed by Steele, Spencer, and Lynch (1993), individuals that have high self-esteem also have positive self-concepts, which provide them with more coping skills and resources to not be as impacted by inconsistent behaviors that challenge one's self-system. Specifically, the authors suggest that individuals with high self-esteem that are reminded of their positive traits have less of a need to rationalize an inconsistency, as it may not represent such a large threat to their self-system.

Both studies (Steele et al., 1993; Aronson & Mettee, 1968) provide unique insights for self-affirmation interventions; Veterans tend to be trained to demonstrate high confidence and competence, or explicit self-esteem. If their self-esteem is secure and they have the opportunity to affirm themselves, they should have less reason to engage in dissonance-reducing strategies. However, if there is an imbalance between their self-esteem and their coping resources, psychological inconsistencies may still lead to more dissonance-reducing behaviors like information avoidance. Yet, if they can affirm themselves, their self-system could be made more tolerant of these inconsistencies. Adding more nuance to the discussion, research has shown that Veterans with PTSD have more temporal fluctuations in self-esteem than those without (Kashdan, Uswatte, Steger, & Julian, 2006). Therefore, Veterans may react differently to mental health information; it may actually be most threatening to people with defensive high self-esteem, which consists of high explicit self-esteem but low implicit self-esteem; this self-state is hypothesized to be linked with a depleted pool of self-resources to draw upon during the active experience of a threat (Sherman & Cohen, 2006).

Clearly, both maintaining appearances of consistency and maintaining a positive self-concept is important; when personally relevant and threatening information is presented that threatens this, people are more likely to look for faults in the message than when they are non-relevant (Sherman & Cohen, 2006). However, research has demonstrated that if an individual is affirmed, they may be open to different, counter attitudinal viewpoints (Cohen et al., 2000). As a result, psychologists have attempted to see if self-affirmation interventions can be used to increase openness to health-related concerns that could threaten one's self-concept as healthy. Howell & Shepperd (2012) found that college students who completed a self-affirmation task were less likely to avoid reading the results of a health test that may reveal they are at increased risk for a disease. In a follow-up study (Howell & Shepperd, 2012), the authors also found that self-affirmed individuals are less likely to avoid health-risk information when it is paired with "obligation" information which, per the experiment, required that the individual seek treatment if they were determined to be at-risk.

Additional research corroborates these findings and has indicated that self-affirmation increases processing, personal relevance, and attention paid to health-risk information, leading to increased intentions to change behaviors (Harris & Epton, 2009). Overall, it appears that a self-affirmation task can reduce avoidance of threatening information, even when it may require action to address. This has implications for help seeking. Mental health care information alone may be threatening, and the direct requirement or heavy-handed suggestion that one should seek help can further exacerbate feelings of distress and desires to avoid. However, it appears that affirming the self boosts one's "psychological immune system" (Gilbert et al., 1998) enough to withstand

threatening physical health information, which raises the question: what do these interventions actually do on a more fundamental level?

Research has demonstrated that self-affirmation interventions may tap in to our more basic, physiological defense mechanisms. Crowell and colleagues (2015) sought to assess if a self-affirmation writing task could reduce connection between the behavioral-inhibition system (BIS) and the startle-eyeblink response, a defensive reflex that appears when presented with fear-inducing stimuli. The BIS is sensitive to punishment and novelty, and restricts behavior that could result in painful outcomes (Carver & White, 1994; Gray, 1981). BIS sensitivity has been shown to predict startle-eyeblink response magnitude in the presence of threatening images (Caseras et al., 2006). Results revealed that BIS sensitivity predicted the magnitude of participants' startle-eyeblink responses when presented with negative photos only for those who were not self-affirmed. In other words, regardless of trait-level BIS sensitivity, engaging in self-affirmation can pacify the self even in the face of threat to more primitive mechanisms. It is possible that threat sensitivity via heightened BIS activation may also play a role in the fear of mental health care information. Similar avoidant behaviors have been found to correlate with increased levels of behavioral inhibition in adult Veterans, which has also demonstrated relationships with PTSD symptom severity and anxiety (Myers, VanMeenen, & Servatius, 2012).

Although these results may suggest that self-affirmation interventions operate on multiple "levels" of the self, it is important to consider how they are implemented, as their success varies by design. For example, when people are informed of self-affirmation's intent to reduce defensiveness, its effects are impaired (Sherman et al.,

2009). As research has suggested that these interventions reduce defensiveness and support acceptance of threatening health information, increase openness to other views, and improve self-control, they may be particularly useful for improving attitudes towards counseling (Howell & Shepperd, 2012; Sherman et al., 2009; Cohen et al., 2000; Schmeichel & Vohs, 2009). Successful engagement with mental health care information requires that a person is open to threatening information and willing to consider alternative perspectives, two characteristics that are greatly fostered by self-control.

In order to test the effect of self-affirmation on willingness and intentions to seek psychotherapy, Lannin and colleagues (2013) randomized undergraduate students who met criteria for clinical distress to either a self-affirmation or control condition before reading an article about psychotherapy and its benefits. Results revealed that self-affirmed students had significantly lower self-stigma for seeking help. This reduction in self-stigma predicted increased willingness to seek psychotherapy. Although the efficacy of self-affirmation interventions for increasing attitudes towards mental health care have not been studied extensively, previous research suggests its future utility in reducing the self-stigma of seeking help in populations that could benefit from services.

Rationale for Future Research

As more Veterans continue to return home, their mental health needs will become increasingly salient. Fortunately, there are available services that can address their concerns. However, due to the low rates of mental health care utilization, there is a clear need for programs that encourage treatment seeking behaviors. Previously discussed interventions, although demonstrating a range of effectiveness in reducing stigma, all seem to be missing a core component: work with the self. That is, other interventions

may not explicitly consider, or tailor to, the identity of the person receiving the information. This piece may be especially important for Veterans, a group traditionally socialized to have a sense of self strongly defined by competency and self-sufficiency (Skopp et al., 2012). Mental health information that may threaten this identity may to lead to increased avoidance and derogation of the material.

However, if presented with the opportunity to engage in a self-affirmation task prior to exposure to threatening material, they may be able to withstand the threat by bolstering their psychological "immune system" through invoking other key values in a non-threatened domain, placing the subsequent threat in a more meta-context and reducing its impact (Gilbert et al., 1988; Steele, 1988). Veterans may endorse many of the values (e.g., teamwork, leadership) that are typically used in self-affirmation writing tasks, increasing accessibility of these prized characteristics and the likelihood of successful self-affirmation (Peterson & Seligman, 2004). Ideally, this task would facilitate increased and more thorough engagement with threatening information, ultimately leading to increased intentions to modify behaviors (ie., help-seeking) that would address their psychological concerns (Harris & Epton, 2009).

Clearly, self-affirmation should be seriously considered for future Veteran interventions. However, it is also important that the educational material aligns with Veteran needs. Demonstrating the need for psychoeducation, current findings highlight the need to educate people on when symptoms merit professional help, as the majority of OEF/OIF Veterans indicate that they would only seek treatment if their problems were very bad (Vogt et al., 2014). Interventions, thus, should demonstrate that help-seeking is not only for the seriously distressed (thus, further reducing stigma) but can also help with

common life problems experienced by Veterans (e.g., transitional difficulties, relationship problems). It should also highlight other Veterans' experience with mental health care, which may help normalize distress and help-seeking (Cornish, Thys, Wade, & Vogel, 2014). Although psychoeducation continues to be a primary method of delivering mental health information to prospective consumers, its potential may be greatly augmented by a self-affirmation task. Therefore, it seems that future research designed to reduce help-seeking stigma in Veteran populations should be strongly rooted in self-affirmation and psychoeducational theory.

The Present Study

As self-affirmation interventions may allow Veterans to transcend self-image concerns (e.g., presenting as weak), they may feel empowered, increasing tolerance of stigma, thus allowing for the accommodation of threatening information (Crocker et al., 2008; Ting & Hwang, 2009). In the efforts of increasing attitudes towards help seeking and actual treatment seeking behaviors, our study will use a self-affirmation ranking and writing task (compared to a no-affirmation control condition) to see if it could decrease Veterans' avoidance of mental health video information tailored specifically to Veterans, thus increasing content processing and attitudes towards counseling.

Hypothesis 1: The self-affirmation writing task will reduce the perceived threat of the psychoeducational information relative to the psychoeducation only condition.

Hypothesis 2: The self-affirmation writing task will increase engagement with the psychoeducational information relative to the psychoeducation only condition.

Hypothesis 3: The self-affirmation writing task will reduce the self-stigma of seeking help relative to the psychoeducation only condition.

Hypothesis 4: The self-affirmation writing task will improve attitudes towards help-seeking for psychological issues relative to the psychoeducation only condition.

Hypothesis 5: The self-affirmation writing task will increase intentions to seek counseling relative to the psychoeducation only condition.

Hypothesis 6: The effects of the self-affirmation writing task on the dependent variables described in hypotheses 3-5 (i.e., reducing self-stigma, improving attitudes towards help-seeking, increasing intentions to seek counseling) will be maintained for a week following the intervention.

CHAPTER 3

METHODS

Participants

IRB approval was obtained before recruiting participants (see Appendix D). A total of 162 undergraduate students from colleges and universities that are members in the Iowa Advisory Council on Military Education (ACME) who self-identified as a Veteran with experience in serving the U.S. Armed Forces (e.g., Navy, Army, Air Force, Marines, Air Force, Reserves, National Guard) agreed to participate and provided data. It is important to note that individuals who identify as Veterans may still be serving in some capacity within the military, as long as they previously left a certain unit under any conditions besides a dishonorable discharge.

When this sample was then limited to participants who, at minimum, provided usable data for Time 2 and passed the manipulation checks, the sample was reduced to 103. However, this sample consisted of many individuals who had previously sought mental health care from a professional (n=58, 56.3%). Given previous findings, our sample seemed unrepresentative of Veterans, given that as few as 13% may seek help from a licensed care provider (Hoge et al., 2004). In addition, the psychoeducational information was targeted toward Veterans who had not sought help before. Therefore, we focused our data analyses on participants who had not previously sought help before. This sample consisted of 43 participants.[1] See Table 1 for demographic information.

[1] For the analyses that follow, I am reporting tests conducted with these 43 participants. However, I also conducted these analyses with the larger sample that included those who had sought services before. None of those analyses showed significant differences between the intervention and control group on any of the outcome variables. This is not surprising considering the psychoeducational intervention was not designed for those who have already received psychological services.

Sample identification. As previously discussed, participants were recruited via colleges and universities participating in IA-ACME. Student Veterans service coordinators sent out invitations to participate to their respective student base. We originally sought to recruit 150 participants from the approximate 1400 student Veterans attending these schools, but because of increased funding opportunities, we attempted to include more. For more information on participant recruitment and progress through the study, please see Figure 1.

Table 1

Frequencies, Means, and Standard Deviations for Demographic Variables and Covariates

	Self-affirmation + psychoeducation (n = 20)	Psychoeducation only (n = 23)	Total (N = 43)
Age			
Mean	26.55	27.87	27.26
SD	10	9.76	9.78
Gender			
Male	16 (80%)	21 (91.3%)	37 (86%)
Female	4 (20%)	2 (8.7%)	6 (14%)
Race/Ethnicity			
Caucasian	17 (85%)	22 (95.7%)	39 (90.7%)
African-American	2 (10%)	1 (4.3%)	3 (7%)
Hispanic/Latino/a	1 (5%)	0	1 (2.3%)
Year in school			
Freshman	5 (25%)	6 (26.1%)	11 (25.5%)
Sophomore	4 (20%)	6 (26.1%)	10 (23.3%)
Junior	2 (10%)	5 (21.7%)	7 (16.3%)
Senior	5 (25%)	5 (21.7%)	10 (23.3%)
Graduate student	4 (20%)	1 (4.4%)	5 (11.6%)
Sexual orientation			
Heterosexual	20 (100%)	23 (100%)	43 (100%)
Psychological distress			
Mean	11.4	9.52	10.39
SD	5.3	3.75	4.58

Procedures

Time 1. Participants who followed the link in the invitation e-mail received a survey on Qualtrics. After consenting, participants provided demographic information, which also allowed us to confirm that they were student Veterans. After, they indicated whether they had sought professional mental health care before and then filled out the

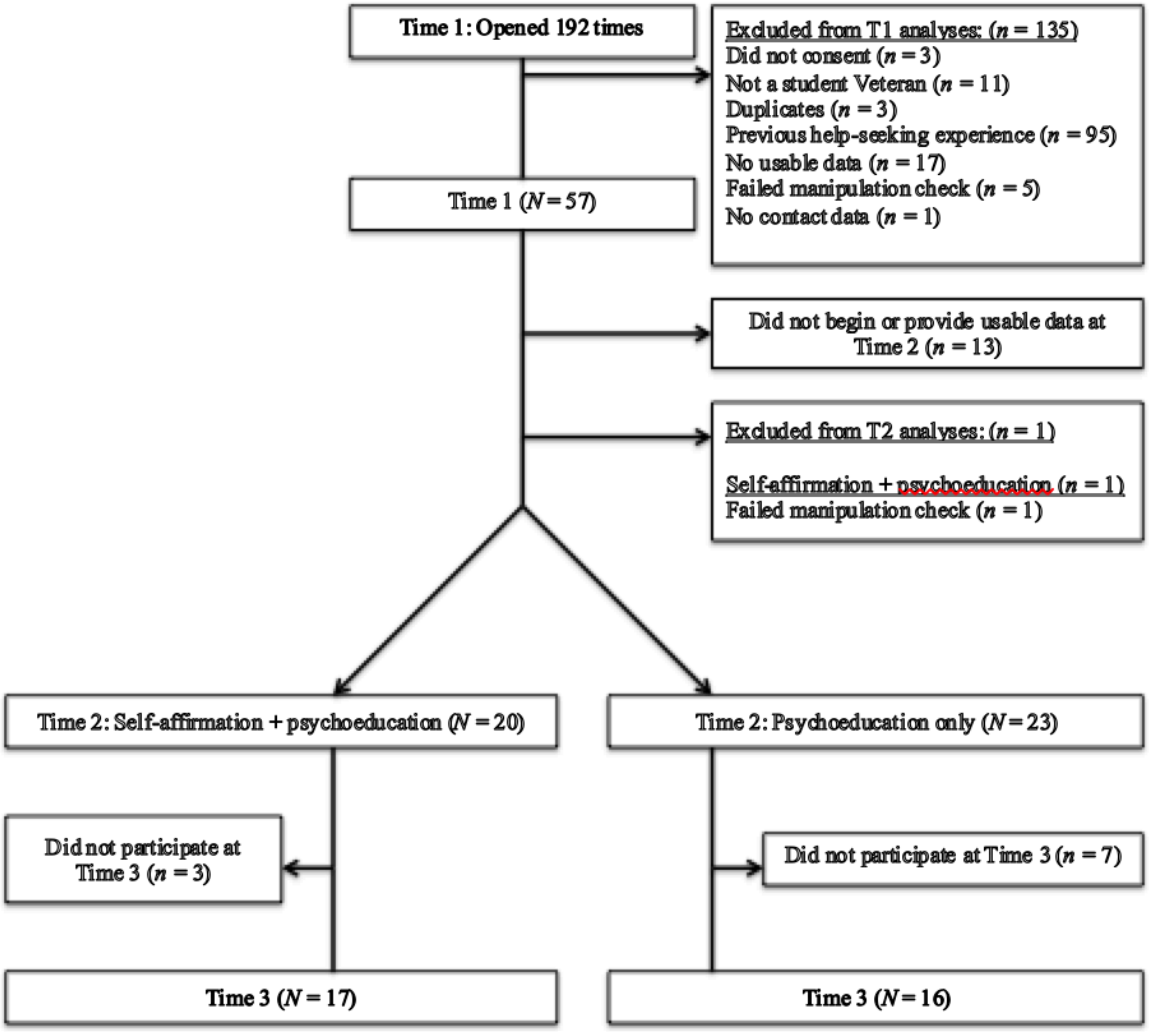

Figure 1. Flow of Participants from Initial Invitation throughout all 3 Time Points

Kessler Psychological Distress Scale (K6; Kessler et al., 2002, Self-Stigma of Seeking Help Scale (SSOSH; Vogel et al., 2006), Attitudes Towards Seeking Professional

Psychological Help Scale-Short Form (ATSPPH-SF; Fischer & Farina, 1995), and the Intentions to Seek Counseling Inventory (ISCI; Cash, Begley, McCown, & Weise, 1975). See Measures section for more details.

Time 2. A week after completing Time 1, participants were invited to participate in the follow-up study on Qualtrics. Upon entering the survey, they were asked to provide their initials and e-mail addresses to be contacted again for Time 3. In the self-affirmation-plus-psychoeducation condition, participants completed the values affirmation task before being presented with the psychoeducational video and brochure. In the education-only condition, participants began the study by viewing the video and brochure.

Self-affirmation plus psychoeducation intervention. Participants in the self-affirmation-plus-education condition used electronic slider-bars to rate the personal importance of 12 values identified by Peterson and Seligman (2004). These values "enable human thriving" and are cross-culturally sensitive (Seligman, Steen, Park, & Peterson, 2005, p. 411). Examples of these personal values are creativity, wisdom, bravery, love, and forgiveness. After ranking the values, participants were asked to write for five minutes about why their top-ranked value is important and meaningful for them. Qualtrics, based off of use of the slider-bars, calculated participants' highest ranked value and informed them about what they chose. Then, they rated, on a Likert scale ranging from 1 (*not at all*) to 7 (*very much*), the extent to which this value is something they like about themselves. For more information, see Appendix B. After this, participants received the psychoeducation information.

Psychoeducation-only intervention. Both conditions received the psychoeducational materials used by Cornish and colleagues (2014). However, those in the psychoeducation-only condition did not complete a self-affirmation task. The psychoeducation began with a three-and-a-half minute video of Veterans discussing their experiences with mental health and counseling. Afterward, participants read a two-page informational brochure that shared stories of Veterans' experiences with mental health care, challenged myths about treatment utilization and reframed treatment seeking as a sign of strength[2]. For more information, see Appendix B.

After participants completed the educational intervention, they completed measures assessing reactions to the mental health information (e.g., threat and avoidance). They then completed the SSOSH, ATSPPH-SF, and ISCI and indicated whether they were interested in learning more about mental health services at their university by being linked to the appropriate website.

Time 3. Participants completed a final survey approximately one week after their completion of Time 2. During this administration, participants completed the SSOSH, ATSPPH-SF, and ISCI.

Measures

Threat of mental health information. In order to examine how threatening the psychoeducational content was to participants, we used a 4-item scale, which was modified from one that has previously been utilized by Lannin and colleagues (2013).

[2] The psychoeducation-only condition is representative of current interventions that are currently used to reduce stigma. We did not include a comparison ranking and writing task within this condition for this reason. Many websites (i.e., www.maketheconnection.net) are designed to provide information regarding mental health statistics, treatment options, and anecdotes from those who sought counseling as a way to normalize mental health concerns. Therefore, the psychoeducation-only condition is externally valid and is representative of what Veterans looking to learn more about treatment may encounter.

Sample items include “How much did this message make you feel frightened?” and “How much did this message make you feel tense?” The questions are rated on a seven-point Likert scale ranging from 1 (*not at all*) to 7 (*very much*). Higher scores indicate higher threat reactions. In our sample, it demonstrated a Cronbach’s alpha of .90.

Engagement: Avoidance of mental health information. Avoidance of threatening information was originally measured by a 6-item scale previously used by Lannin and colleagues (2013). A sample item reads as follows: “When I saw the information about mental health, my first reaction was I didn’t want to think about it.” 2 items were reverse scored. Participants ranked their agreement with these items on a seven-point Likert scale ranging from -3 (*not at all*) to 3 (*very much*), which was then recoded from 1 (*not at all*) to 7 (*very much*). Higher scores indicate higher avoidance. For our sample, the original scale yielded a Cronbach’s alpha of .48. One item was removed to increase Cronbach’s alpha to .58. Still, this indicates low internal reliability, and findings related to this scale should be interpreted with this caveat.

Engagement: Behavioral measure of engagement with mental health information.

Engagement was also measured by the combined amount of time (measured in seconds) that participants spent on the particular pages with the video and brochure. Qualtrics automatically captures this time from the time the participants click on the page to the time they click off.

Self-Stigma of Seeking Psychological Help (SSOSH). The Self-Stigma of Seeking Help (SSOSH; Vogel et al., 2006) is a ten-item scale that assesses the perceived impact on one’s self-esteem for seeking professional mental health care. Example items

are “I would feel inadequate if I went to a therapist for psychological help” and “I would feel worse about myself if I could not solve my own problems.” Items are rated on a 5-point Likert scale from 1 (*strongly disagree*) to 5 (*strongly agree*). Higher scores indicate higher self-stigma. Five items are reverse scored. The SSOSH has been shown to predict attitudes towards individual and group counseling (Schectman, Vogel, & Maman, 2010). Additionally, it has demonstrated high internal consistency via a Cronbach’s alpha of .89 and test-retest reliability over a two-month period of .72 (Vogel et al., 2006; Tucker et al., 2013). The SSOSH in this sample was .90 at Time 1, .88 at Time 2, and .88 at Time 3. There was also an attention check item embedded within the scale at each time point asking participants to “please select ‘strongly disagree’ for this question.”

Attitudes Towards Seeking Professional Psychological Help (ATSPPH-SF). The Attitudes Towards Seeking Professional Psychological Help-Short Form (ATSPPH-SF; Fischer & Farina, 1995) is a revised 10-item scale based on the original, 29-item ATSPPH (Fischer & Turner, 1970). A sample item is “If I believed I was having a mental breakdown, my first inclination would be to get professional attention.” Items are rated on a four-point Likert scale from 0 (*disagree*) to 3 (*agree*). Higher scores indicate more positive attitudes towards counseling. Five items are reverse scored. The ATSPPH-SF has demonstrated strong internal consistency with a Cronbach’s alpha of .84 and one-month test-retest reliability of .80 (Fischer & Farina, 1995). Cronbach’s alpha for ATSPPH-SF in this sample was .81 at Time 1, .87 at Time 2, and .87 at Time 3.

Intentions to Seek Counseling Inventory (ISCI). The Intentions to Seek Counseling Inventory (ISCI; Cash et al., 1975) is a 17-item scale that assesses how likely people are to use psychological help for specific problems. Factor analysis of the ISCI

revealed three factors: psychological and interpersonal concerns, academic concerns, and drug use concerns (Cepeda-Benito & Short, 1998). For the purpose of this study, only ten of the original seventeen items were used, all from the psychological and interpersonal concerns domain, as the stigma of seeking counseling for academic and drug concerns may be different than that of seeking counseling for mental illness (Link et al., 1987). It has demonstrated internal consistency via a Cronbach's alpha of .90 (Tucker et al., 2013). For this sample, the ISCI exhibited a Cronbach's alpha of .85 at Time 1, .90 at Time 2, and .94 at Time 3.

Kessler Screening Scale for Psychological Distress (K6). The K6 is a six-item measure created by Kessler and colleagues (2002). The measure assesses nonspecific distress present in the previous month; however, for the purpose of this study, we assessed distress experienced in the previous week. The question stem asks participants to read and rate statements regarding how often they have felt certain feeling. Items are rated on a 5-point Likert scale from 1 (*none of the time*) to 5 (*all of the time*). Sample items include ratings of feelings of being "nervous," "restless or fidgety," or "worthless." The K6 has demonstrated adequate internal consistency with a Cronbach's alpha of .89. In our sample, Cronbach's alpha was .87.

CHAPTER 4

RESULTS

Preliminary Analyses

Random responders. Each timepoint of our study included a manipulation check in the SSOSH scale. Twelve percent of participants (*n*=6) answered the item incorrectly ("please select 'strongly disagree'") and were excluded from the main analyses, as random response from even 5% of participants may have an impact on the results (Crede, 2010). Other reasons for exclusion are listed in Figure 1.

Power analysis. I conducted an *a priori* power analysis on the F-test in ANCOVA (fixed effects model) with an alpha level of .05 and power (1 - β) at 0.80. Given the design, which potentially includes one covariate and two cells in the treatment condition, the present study requires 128 people, or 64 in each group, to detect a medium effect size of *f* = .25. With all the other parameters identical, this study would need 787 participants to detect a small effect size (*f* = .10), or 52 participants to detect a large effect size (*f* = .40). Based on our recruitment strategy and previous research, I anticipated being able to recruit the necessary 128 total participants to detect a medium effect; however, due to our focus on only those who had not sought treatment before, there were only 43 participants at Time 2 and 34 at Time 3. Thus, this study did not have adequate power to find a medium or small effect and only marginally enough to find a large effect.

Correlations/descriptive statistics. Participants who failed the SSOSH manipulation check, did not complete Time 1 or completed Time 1 and did not provide data for at least one of the outcome measures for Time 2 are not included in the descriptive data table, correlation matrix, or the main analyses. Table 1 displays

demographic descriptive statistics by condition and with the total sample. Descriptive data for the outcome measures are in Table 2. Correlations between age, gender, psychological distress, and outcome variables is in Table 3.

Table 2

Means, Standard Deviations, and Sample Size by Condition

	Self-Affirmation + Psychoeducation								
	Time 1			Time 2			Time 3		
	M	*SD*	*n*	*M*	*SD*	*n*	*M*	*SD*	*n*
SSOSH	2.67	.66	20	2.60	.79	20	2.52	.74	17
ATSPPH-SF	1.40	.45	20	1.67 [a]	.55	20	1.67 [a]	.62	17
ISCI	2.29	.82	20	2.77 [a]	1.11	20	3.02 [a]	1.36	17
Threat	--	--	--	1.99	1.29	20	--	--	17
Avoidance	--	--	--	3.24	1.21	20	--	--	17
Engagement	--	--	--	359	219	20	--	--	17
	Psychoeducation Only								
	Time 1			Time 2			Time 3		
	M	*SD*	*n*	*M*	*SD*	*n*	*M*	*SD*	*n*
SSOSH	2.78	.82	23	2.75	.66	23	2.76	.64	16
ATSPPH-SF	1.27	.54	23	1.44 [a]	.42	22	1.38	.47	16
ISCI	1.97	.79	23	2.07	.84	22	2.06	.74	16
Threat	--	--	--	1.37	.65	23	--	--	16
Avoidance	--	--	--	3.52	.76	23	--	--	16
Engagement	--	--	--	324	280	23	--	--	16

Note: SSOSH = Self-Stigma of Seeking Help Scale, ATSPPH-SF = Attitudes Towards Seeking Professional Pysychological Help-Short Form, ISCI = Intentions to Seek Counseling Inventory, Threat = self-reported threat of psychoeducation, Avoidance = self-reported avoidance of psychoeducation, Engagement = time spent (in seconds) on psychoeducation

[a] Indicates significant paired-samples t-test compared with the respective outcome at Time 1, $p < .05$.

Table 3

Correlations between Age, Gender, Psychological Distress, and the Outcome Variables.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Demographics															
1. Gender	--														
2. Age	-.10	--													
3. K6	.37*	-.14	--												
Time 1															
4. SSOSH	-.03	.01	.27	--											
5. ATSPPH-SF	.04	.13	-.17	-.62**	--										
6. ISCI	-.01	.07	-.03	-.35*	.52**	--									
Time 2															
7. Threat	.07	-.06	.25	.28	-.22	-.21	--								
8. Avoidance	.12	.09	.53**	.22	-.22	.13	.45*	--							
9. Engagement	-.13	.14	.00	.23	-.12	.05	-.16	-.26	--						
10. SSOSH	-.17	.06	.20	.73**	-.56**	-.43**	.49**	.33*	-.03	--					
11. ATSPPH-SF	.13	.02	-.12	-.32*	.74**	.62**	-.27	-.39*	.25	-.49**	--				
12. ISCI	.08	.15	.01	-.22	.51**	.68**	-.09	-.18	-.03	-.35*	.60**	--			
Time 3															
13. SSOSH	-.15	-.03	-.03	.84**	-.55**	-.41*	.46**	.09	-.13	.79**	-.46**	-.21	--		
14. ATSPPH	.17	.17	-.15	-.48**	.78**	.73**	-.30	-.20	.21	-.50**	.89**	.6**	-.50**	--	
15. ISCI	-.04	27	-0.8	-.23	.55*	.60**	-.05	-.21	.16	-.22	.66*	.78**	-.29	.77*	--

Note: K6 = Kessler Screening Scale for Psychological Distress; SSOSH = Self-Stigma of Seeking Help Scale; ATSPPH-SF = Attitudes Towards Seeking Professional Psychological Help, Short-Form; ISCI = Intentions to Seek Counseling Inventory; Threat = Self-reported threat of psychoeducation; Avoidance = Self-reported avoidance of psychoeducation; Engagement = time spent (in seconds) on psychoeducation.

* = $p < .05$, ** = $p < .01$, *** $p = < .001$

Comparisons of early drop-outs to analyzed sample. I conducted a chi-square to assess for differences in gender, year in school, sexual orientation, and race between participants who have never sought help, passed the SSOSH manipulation check at time 1, and did not provide data for Time 2 (n=13) with those who did (n=43). No significant differences were found. I also conducted an independent-samples t-test to assess for differences on age, gender, K6, and Time 1 SSOSH, ATSPPH-SF, and ISCI. There was no significant difference between groups.

Assessment of psychological distress as covariate. Because psychological distress is an important factor in the psychological help-seeking process and therefore might be important in my analyses, I conducted bivariate correlations between psychological symptoms (i.e., K6) and all of the outcome variables. The K6 was significantly correlated with avoidance of mental health information. As a result, in the main analyses that follow, I included psychological distress as a covariate when testing this outcome.

Testing Assumptions of Analysis of Covariance (ANCOVA)

ANCOVA assumes equal cell sizes. My data had uneven cell sizes. However, we did not remove data to balance conditions, as per Tabachnik and Fidell (2000). Another important assumption is homogeneity of variance. To test homogeneity, I conducted QQ-plots for all my outcome measures. It appears that there were violations of homogeneity of variance for avoidance and threat, but not for any of the other outcome variables. I decided to include these outcomes in the analyses despite this violation, with the caveat that this assumption was violated and significant effects, should they be present, should be interpreted with caution.

Tests of normality revealed a violation using Shapiro-Wilk's test for intentions to seek counseling (p = .04) at Time 1. However, ANCOVA is robust to violations of normality and homoscedasticity, as long as both do not co-occur in an analyses (Olejnik & Algina, 1984). Independence of data cannot wholly be assumed, as it is possible that student Veterans at their respective universities spoke to their peers about participating. There were no violations for homogeneity of regression slopes. To test for linearity, scatterplot matrices were conducted and visually inspected. No curvilinear relationships were detected, so we can assume linearity assumptions are met. I also ran a paired samples t-test comparing outcome (SSOSH, ATSPPH-SF, and ISCI) at Time 1 and Time 2, and Time 1 and Time 3. See Table 2 for descriptive statistics.

Main Analyses

For all main analyses, effect sizes were calculated using Hedges' g, as it provides a better estimate than Cohen's d for smaller sample sizes (Grissom & Kim, 2005). Interpretation guidelines suggest that effect sizes of .20, .50, and .80 are correspondingly small, medium, and large (Cohen, 1988).

Hypothesis 1: The self-affirmation writing task will reduce perceived threat of the psychoeducational information relative to the psychoeducation-only condition.

Analyses 1: In order to test if the self-affirmation writing task reduced perceived threat of the psychoeducational information relative to the psychoeducation-only condition, I conducted an independent samples t-test, which showed a violation of homogeneity of variance. There was no significant difference between conditions, $t(1,41) = -1.93$, p = .06, Hedges' g = .61.

Hypothesis 2: The self-affirmation writing task will increase engagement with the psychoeducational information relative to the psychoeducation-only condition.

Analyses 2: In order to test if the self-affirmation writing task increased engagement with the psychoeducational information relative to the psychoeducation-only condition, I conducted two analyses. The first was an ANCOVA with self-reported avoidance of the psychoeducation information as the dependent variable. The self-affirmation writing task condition was used as the two-level factor and psychological distress (i.e., K6) was used as a covariate because distress was significantly correlated with self-reported avoidance. This ANCOVA showed no significant differences between conditions, $F(1,40) = 4.09$, $p = .05$, Hedges' $g = .28$. The second analysis was an independent samples t-test, with self-affirmation writing task as the condition and measure of engagement (the combined amount of time spent watching the video and reading the brochure) as the dependent variable. The t-test showed no significant differences between conditions, $t(1,41) = -.46$, $p = .65$, Hedges' $g = .14$.

Hypothesis 3: The self-affirmation writing task will reduce the self-stigma of seeking help relative to the psychoeducation-only condition.

Analyses 3: In order to test if the self-affirmation writing task reduced the self-stigma of seeking help relative to the psychoeducation-only condition I conducted an ANCOVA with the self-affirmation writing task condition as the two-level factor and the self-stigma of seeking help (SSOSH) at Time 1 as the covariate. The dependent variable was the SSOSH measured at Time 2. The ANCOVA showed no significant differences between conditions, $F(1,40) = .15$, $p = .70$, Hedges' $g = .20$.

Hypothesis 4: The self-affirmation writing task will improve attitudes towards help-seeking for psychological issues relative to the psychoeducation-only condition.

Analyses 4: In order to test if the self-affirmation writing task improved attitudes towards help-seeking for psychological issues relative to the psychoeducation-only condition I conducted an ANCOVA with the self-affirmation writing task condition as the two-level factor and attitudes towards seeking professional psychological help (ATSPPH-SF) at Time 1 as the covariate. The dependent variable was attitudes toward ATSPPH-SF measured at Time 2. The ANCOVA showed no significant differences between conditions, $F(1,39) = .52$, $p = .47$, Hedges' $g = .46$.

Hypothesis 5: The self-affirmation writing task will increase intentions to seek counseling relative to the psychoeducation-only condition.

Analyses 5: In order to test if the self-affirmation writing task increased intentions to seek counseling relative to the psychoeducation-only condition, I conducted an ANCOVA with the self-affirmation writing task condition as the two-level factor and intentions to seek counseling (i.e., ISCI) measured at Time 1. The dependent variable was ISCI measured at Time 2. The ANCOVA showed no significant difference between conditions, $F(1,39) = 3.98$, $p = .053$, Hedges' $g = .70$.

Hypothesis 6: The effects of the self-affirmation writing task on the dependent variables described in hypotheses 3-5 (i.e., reducing the self-stigma of seeking help, improving attitudes towards help-seeking for psychological issues, increasing intentions to seek counseling) will be maintained for a week following the intervention.

Analyses 6: In order to test if the self-affirmation writing task reduced the self-stigma of seeking help, improved attitudes towards help-seeking for psychological issues,

and increased intentions to seek counseling relative to the psychoeducation-only condition, I conducted three ANCOVAs with SSOSH, ATSPPH-SF, and ISCI measured at Time 3 as dependent variables, with the respective measure at Time 1 as the covariate and the self-affirmation writing task condition as the two-level factor for all ANCOVA's.

The first ANCOVA on the SSOSH at Time 3 showed no significant difference between conditions after controlling for the SSOSH at Time 1, $F(1, 30) = .36$, $p = .55$, Hedges' $g = .34$. The second ANCOVA on the ATSPPH-SF at Time 3 showed no significant difference between conditions after controlling for ATSPPH at Time 1, $F(1, 30) = 1.81$, $p = .19$, Hedges' $g = .55$. The final ANCOVA on the ISCI at Time 3 showed a significant difference between conditions, $F(1, 30) = 5.78$, $p = .02$, Hedges' $g = .85$. This finding suggests that individuals who completed the self-affirmation task and received psychoeducation demonstrated higher intentions to seek counseling than those who only received psychoeducation, which lends preliminary evidence to the utility of a self-affirmation intervention to enhance the effect of psychoeducation on help-seeking behavior in student Veteran populations.

CHAPTER 5

DISCUSSION

The current study examined the immediate and longer-term effects of a self-affirmation intervention to increase attitudes towards counseling for student Veterans who have never sought help before. Overall, results partially support the efficacy of a self-affirmation and psychoeducational intervention to increase intentions to seek counseling for psychological and interpersonal concerns. Participants who completed a self-affirmation task before receiving psychoeducation about counseling indicated greater intentions to receive mental health care a week after the intervention compared with those participants who only received the psychoeducation. These findings correspond with those of Sherman and Cohen (2006), who propose that self-affirmation interventions enable people to adopt an approach-orientation to threatening behavior. Although the self-affirmation intervention increased intentions to engage in help-seeking behavior, this intervention did not significantly improve attitudes towards seeking professional help or the self-stigma of seeking help above the psychoeducational intervention alone.

One possible reason we did not find significant effects for the self-affirmation condition on the self-stigma of seeking help or attitudes towards seeking professional help is that these outcomes may be more resistant to change for Veteran populations. Previous research has found that a similar self-affirmation intervention did reduce the self-stigma of seeking help; however, this study was conducted with a general undergraduate sample (Lannin et al., 2013). Student Veterans are a distinctly different population than traditional college students (American Council on Education, 2008).

It is possible that those with high self-stigma of seeking help may already view themselves as weak, so seeking help, although negative, may still be consistent with their self-image. As Veterans are typically trained to be action-oriented, this could allow them to report increased intentions to seek counseling while simultaneously holding negative thoughts about it (Aronson, 1968). This may be adaptive for soldiers who must act quickly in combat or for situations in which they may not feel positive, yet recognize the importance of action. Essentially, this may enable attitudes and self-stigma to be "passed over" in our proposed model with student Veterans showing increases in intentions without the concomitant change in attitudes or self-stigma.

It is also possible that self-affirmation interventions may operate more slowly on these domains. Both the self-stigma of seeking help and attitudes towards seeking help were improving in the hypothesized direction over the course of the study (see Table 2) in the self-affirmation condition; this was only true for attitudes towards seeking help between Time 1 and Time 2 for those in the psychoeducation condition. This suggests that our intervention may be useful for these domains. It is also possible that participants may have just needed more time to process the information and how their self-view would be impacted by a decision to seek counseling before demonstrating significant differences.

It is also possible that our psychoeducation was not effective enough. Participants were provided the opportunity to share their feedback about the psychoeducation. Reactions were largely positive, but there are still clearly improvements to be made. There were comments that addressed the brochure's overwhelming quantity of information and difficult-to-believe photos of "Veterans." Other comments

acknowledged the fact that our brochure did not address how unit leaders may pressure their members not to report mental illness as it could reduce chances of employment and ability to deploy.

Limitations

Although the previous discussion provides possible reasons for the lack of significant differences, one primary concern with the present study is the limited sample size. This is an important limitation of the present study and is likely at least part of, if not the central, reason for the lack of significant findings. For certain outcomes, our sample had as few as 42 participants at Time 2 and at Time 3, only 33 participants. Given this sample size, we would only be able to detect a large effect. Although self-affirmation interventions have been shown to be effective for reducing stigma (Lannin et al., 2013) and for promoting behaviors to address health risks (Howell & Shepperd, 2012), rarely, if ever, are these interventions producing large effects. Therefore, it is likely that our study did not have the appropriate power to detect a small or medium effect for the self-stigma of seeking help and attitudes towards counseling.

However, although the self-affirmation intervention did not show a significant effect at Time 2 for intentions to seek counseling (p = .053), it is possible that a larger sample size would have led us to confidently reject the null hypothesis. As the confidence interval includes 0, we are unsure if this is truly an effect or not, despite an estimated Hedges' g of .70. We also did not conduct a Bonferroni correction to account for the multiple analyses that we conducted because of our small sample size. We decided on this more liberal approach so that we might identify some effects that might truly exist; effects that with a more stringent alpha level we would miss due to the limited sample

size and, thus, limited power. Given this decision, however, I remain tentative about my confidence in the significant results I did find.

Another possible limitation regards the implementation of the self-affirmation intervention for this particular population of Veterans. It is possible that participants in the self-affirmation condition were not successfully affirmed enough to demonstrate the hypothesized improvements. Participants were provided with a text-entry box in which they could provide feedback about both the self-affirmation intervention. Although many participants reported the intervention to be adequate, several participants reported feeling limited by the 12 values provided. Although we allowed participants to write in their own value if they did not find it on the provided list, it is possible that including more values would have increased the likelihood of self-affirmation. Additionally, although "honesty" was a commonly chosen top value, it appears that "perseverance" was also commonly chosen. Furthermore, "teamwork," "self-regulation," and "leadership" were also included in the intervention to be ranked. Participants in the self-affirmation condition may have actually affirmed themselves in a "threatened" domain (Sherman & Cohen, 2006). These values are commonly affiliated with the military and may be antithetical to disclosing distress and seeking psychological help. As such these participants may actually have empowered themselves to be more resistant to counseling information.

There are also concerns with internal validity for our study. As the study was conducted remotely and online, it is possible that the participants completed the study in an environment not conducive for attentive participation. If participants were distracted, they may have had less internal focus during the self-affirmation intervention, thereby reducing its effect. It is also possible that students shared their experience taking the

survey with those who had not prior to their participation. Furthermore, not all participants completed each time point one week apart. It is possible that history, maturation, or regression to the mean effects could be at play.

Although there is limited internal validity for our study, it may actually provide evidence for its external validity. There are considerable amounts of mental health outreach efforts that are conducted solely via websites or e-mail. It is reasonable to assume that Veterans, like other populations, use the Internet for a variety of purposes. One of these purposes may be to learn more about their psychological symptoms. If the self-affirmation intervention is to be used to increase intentions to seek psychotherapy, it would be able to be quickly embedded into the current framework of military-based websites. In order to present the intervention in a subtle, non-threatening way, visitors to sites dedicated to Veterans could be offered the opportunity to "learn more about their values." After completing a task similar to one used in our study, they could be provided with psychoeducation.

Future Directions for Research

Although our study found that the self-affirmation condition was successful at improving intentions to seek counseling, future researchers should examine how this outcome is associated with treatment adherence. As the self-stigma of seeking help and attitudes towards counseling did not significantly improve, it is possible that simultaneously-held negative attitudes towards counseling paired with the actual act of seeking help may evoke feelings of psychological inconsistency and increase the likelihood of reduced engagement in the counseling process or higher rates of attrition. However, it is possible that the self-stigma of seeking help may be reduced through the

actual experience of counseling, as Veterans may have stereotypes of what counseling actually looks like (i.e., rigid doctor-patient relationship where the patient is analyzed). Therefore, future research should also examine if increased intentions is the most important outcome compared with the self-stigma of seeking help or attitudes towards counseling on actual treatment-seeking behavior and reduced symptomatology.

Additionally, future researchers should address how to develop even more effective materials for Veterans. Given the sensitivity of this population to counseling and the stigma associated with Veterans, PTSD, and suicide, it may be necessary to create novel self-affirmation interventions that more directly affirm aspects of the Veterans lives that help them to tolerate the discomfort of or threat posed by mental health treatment.

Conclusion

Tyler Boudreau, a former Marine captain, proposes that, given the "skepticism toward the suggestion that the violence of war can hurt the healthiest of minds… [there is] at least a quiet contempt for the psychological wounds of war" (Sandel, 2010, p. 11). This study provides preliminary evidence that this "quiet contempt" can be withstood, as our findings suggest that a self-affirmation intervention may be useful in improving intentions to seek counseling for student Veterans who have never previously sought help before. Although previous research has demonstrated that these interventions indirectly improve willingness to seek help via reductions in the self-stigma of seeking help, our findings contribute to the literature that this may be less important for Veterans (Lannin et al., 2013). Overall, the self-affirmation intervention shows promise and should be explored further. Research that incorporates larger numbers of Veterans would help to

determine the degree to which self-affirmation can truly improve stigma and attitudes, promote help-seeking behaviors, and ultimately encourage Veterans and others who need psychological help to enter therapy.

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APPENDIX A

MEASURES

Kessler Screening Scale for Psychological Distress (K6)

During the past week, about how often did you feel…

	None of the time 1	A little of the time 2	Some of the time 3	Most of the time 4	All of the time 5
…nervous?					
…hopeless?					
…restless or fidgety?					
…so depressed that nothing could cheer you up?					
…that everything was an effort?					
…worthless?					

Self-Stigma of Seeking Help (SSOSH)

Directions: People at times find that they face problems that they consider seeking help for. This can bring up reactions about what seeking help would mean. Please use the 5-point scale to rate the degree to which each item describes how you might react in this situation.

	1 = Strongly disagree	2 = Disagree	3 = Agree/Disagree equally	4 = Agree	5 = Strongly agree
1. I would feel inadequate if I went to a therapist for psychological help.					
2. My self-confidence would NOT be threatened if I sought professional help.*					
3. Seeking psychological help would make me feel less intelligent.					
4. My self-esteem would increase if I talked to a therapist.*					
5. My view of myself would not change just because I made the choice to see a therapist.*					
6. It would make me feel inferior to ask a therapist for help.					
7. I would feel okay about myself if I made the choice to seek professional help.*					
8. If I went to a therapist, I would be less satisfied with myself.					
9. My self-confidence would remain the same if I sought professional help for a problem I could not solve.*					
10. I would feel worse about myself if I could not solve my own problems.					

* = reverse scored

Attitudes Towards Seeking Professional Psychological Help-Short Form (ATSPPH-SF)

Directions: Please read each statement and check the circle corresponding to the scale number that indicates how much you agree with or disagree with the statement.

	0 = Disagree	1 = Probably disagree	2 = Agree	3 = Probably agree
1. If I believed I was having a mental breakdown, my first inclination would be to get professional attention.				
2. The idea of talking about problems with a psychologist strikes me as a poor way to get rid of emotional conflicts.*				
3. If I were experiencing a serious emotional crisis at this point in my life, I would be confident that I would find relief in psychotherapy.				
4. There is something admirable in the attitude of a person who is willing to cope with his or her conflicts and fears without resorting to professional help.*				
5. I would want to get psychological help if I were worried or upset for a long period of time.				
6. I might want to have psychological counseling in the future.				
7. A person with an emotional problem is not likely to solve it alone; he or she is likely to solve it with professional help.				
8. Considering the time and expense involved in psychotherapy, it would have doubtful value for a person like me.*				
9. A person should work out his or her own problems; getting psychological counseling would be a last resort.*				
10. Personal and emotional troubles, like many things, tend to work out by themselves. *				

* = reverse scored

Intentions to Seek Counseling Inventory (ISCI)

Directions: Below is a list of issues people commonly bring to counseling. How likely would you be to seek counseling/therapy if you were experiencing these problems?

	1 = Very unlikely	2	3	4	5	6	7 = Very likely
1. Relationship difficulties							
2. Concerns about sexuality							
3. Depression							
4. Conflict with parents							
5. Difficulty in sleeping							
6. Inferiority feelings							
7. Difficulty with friends							
8. Self-understanding							
9. Loneliness							
10. Difficulties dating							

Threat

For the following questions, we are interested in how you felt about the information you just saw. Please answer honestly and accurately.

	Not at all (1)	2	3	4	5	6	Very much (7)
How much did this message make you feel frightened?							
How much did this message make you feel tense?							
How much did this message make you feel anxious?							
How much did this message make you feel uncomfortable?							

Avoidance

When I saw the information about mental health…

	Strongly disagree (-3)	2	3	4	5	6	Strongly agree (3)
…my first reaction was that I didn't want to think about it							
…I wanted to learn more*							
…I wanted to do something else							
…I tried to avoid really deeply thinking about it							
…I tried to really pay attention to what I was reading*							

* = reverse scored

APPENDIX B

SELF-AFFIRMATION INTERVENTION

Values affirmation ranking task:

Below is a list of values and personal characteristics. Some of these may be values that are very important to you and that you like very much about yourself, with others may be less important to you. Please rank your values from 1 to 6, with 1 being the value/characteristic that you like most about yourself and 6 being the value/characteristic that may not be as important to you.

Love of learning___
Perspective___
Perseverance___
Honesty___
Love___
Kindness___

Below is another list of values and personal characteristics. Some of these may be values that are very important to you and that you like very much about yourself, with others may be less important to you. Please rank your values from 1 to 6, with 1 being the value/characteristic that you like most about yourself and 6 being the value/characteristic that may not be as important to you.

Teamwork___
Leadership___
Self-regulation___
Hope___
Humor___
Gratitude___

If you do not believe that any of these values represent one that is most important to you, please enter one you believe that embodies you best in the text-entry box below (e.g., creativity, bravery, curiosity).

You rated the following value from the first ranking task as the most important: XX
You rated the following value from the second ranking task as the most important: XX

Writing prompt:
Now, please try to let go and explore why this value makes you feel good about yourself. What about this value makes it so important to you? What does it enable you to do? As you write, think about how it might tie to other parts of your life: family, friends, your childhood, your relationships, work, school, or hobbies. Please try to write for the next 5 minutes about these topics or times in which you exercised this value and it brought you happieness.

The third slot is reserved for the value that you entered manually. If you did not enter one, please ignore this selection and leave it ranked on the bottom.

Now, please rank your highest ranked values/characteristics, with "1" being the most important to you and what you like most about yourself and 2 (or 3) being the value/characteristic that may be less important to you.

Top value from ranking task 1___
Top value from ranking task 2___
Text-entry value___

Overall, the value/characteristic below seems to be the one that is most important to you.
Value XX carried forward to here ___

Self-affirmation writing task:

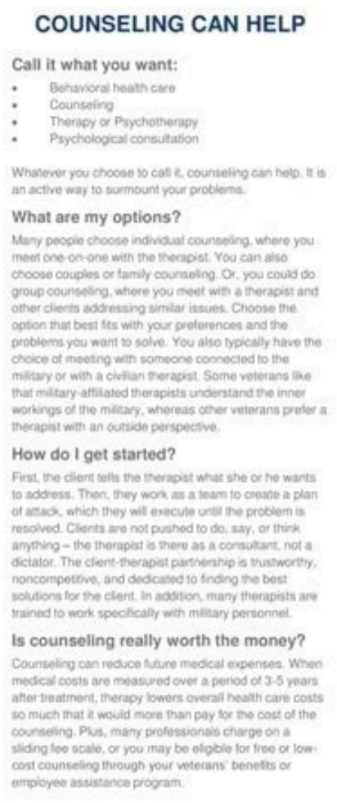
Now, please try to let go and explore why this value makes you feel good about yourself. What about this value makes it so important to you? As you write, think about how it might tie to other parts of your life: family, friends, your childhood, your relationships, work, school, or hobbies. Please try to write for the next 5 minutes about these topics or times in which you exercised this value and it brought you happiness.

APPENDIX C

PSYCHOEDUCATIONAL CONTENT

Please watch the following:
Video embedded in survey, but available at:
https://www.youtube.com/watch?v=A4ab0XLy4B8

We also have this brochure for you to closely review. The sections of the brochure are presented to you in the order that a hard copy of the brochure would be read. At the end, we also provide a "printable" version of the whole brochure.



COUNSELING CAN HELP

Call it what you want:

- Behavioral health care
- Counseling
- Therapy or Psychotherapy
- Psychological consultation

Whatever you choose to call it, counseling can help. It is an active way to surmount your problems.

What are my options?

Many people choose individual counseling, where you meet one-on-one with the therapist. You can also choose couples or family counseling. Or, you could do group counseling, where you meet with a therapist and other clients addressing similar issues. Choose the option that best fits with your preferences and the problems you want to solve. You also typically have the choice of meeting with someone connected to the military or with a civilian therapist. Some veterans like that military-affiliated therapists understand the inner workings of the military, whereas other veterans prefer a therapist with an outside perspective.

How do I get started?

First, the client tells the therapist what she or he wants to address. Then, they work as a team to create a plan of attack, which they will execute until the problem is resolved. Clients are not pushed to do, say, or think anything – the therapist is there as a consultant, not a dictator. The client-therapist partnership is trustworthy, noncompetitive, and dedicated to finding the best solutions for the client. In addition, many therapists are trained to work specifically with military personnel.

Is counseling really worth the money?

Counseling can reduce future medical expenses. When medical costs are measured over a period of 3-5 years after treatment, therapy lowers overall health care costs so much that it would more than pay for the cost of the counseling. Plus, many professionals charge on a sliding fee scale, or you may be eligible for free or low-cost counseling through your veterans' benefits or employee assistance program.

Does getting help mean I'm weak?

There are a lot of myths about counseling and those who seek it out. Going to counseling absolutely does **not** make you weak—in fact, it takes a great deal of courage to ask for help. By going to counseling, you face your problems head on and come out much stronger and happier than you might have otherwise. Just as it makes sense to go to a medical doctor when you have a physical problem, it is also helpful to go to a therapist when you are having mental health, emotional, or relationship problems.

One therapist who works with veterans talked about counseling this way:

"If you fall down with all your gear on, you can get back up on your own. But isn't it a heck of a lot easier if your buddy comes with a hand and helps you back up to your feet?"

Just as this therapist described, the counselor is there to give you a hand, to help you as you find your way back to your feet. By no means would you just passively receive help—instead, you are actively involved in solving your concerns. It's just a heck of a lot easier to get to the place you want to be when you have a therapist there to assist you. After all, they have lots of training in helping people deal with the issues they encounter in life. They can offer new suggestions and ideas because of their outside perspective.

Whether your concerns are big or small, deployment-related or not: counseling can help. Give it a try.

What other veterans are saying about their counseling experience:

"When my problems got to the point that they were affecting my family, I did finally go to counseling. My therapist is really good at what he does. He has helped me to develop tools to deal with things differently and helps me look at issues in new ways. He's definitely helped."

"Once I finally started going to counseling on a regular basis, it really helped. I'm not depressed like I was previously. Counseling helped with a ton of other things too—my sleep, my family life, my job, everything. I'm certainly glad I went."

"I go to counseling not just for memories of deployment but also to get myself back on track again because I forget a lot of things now (after my mild traumatic brain injury). My counselor has really helped me cope with my injuries."


It is normal to struggle.
But you don't have to struggle alone.
Common Life Struggles
These are common concerns for military personnel (and people in general):
• Depression
• Anxiety
• Career/Job Concerns
• Relationship Problems (e.g., with spouse, family, or friends)
Post-Deployment Concerns
Those who have been on deployment often experience these concerns as well:
• Trouble reintegrating to civilian life
• Painful memories or experiences
• Difficulty fitting in and finding others who understand their experiences
• Post-traumatic stress symptoms
Mental health or relationship difficulties are actually quite normal, BUT you don't have to accept these problems as a constant part of your life. Things can get better. These problems don't typically just go away on their own. Usually, you need to take some active steps to combat these problems.
WHERE TO GET MORE INFORMATION
Interactive web resources:
afterdeployment.org
maketheconnection.net
Psychological health information and resources:
Defense Centers of Excellence (DCoE) Outreach Center
866-966-1020
Crisis intervention for service members, veterans, & families:
Military Crisis Line
800-273-8255 (Press "1")
Remember that you can always reach out to a friend, family member, or fellow veteran for ideas and support
I TRIED COUNSELING.
AND I'M SO GLAD I DID.
IT TAKES COURAGE TO ASK FOR HELP.
THESE VETERANS DID.

APPENDIX D

IRB APPROVAL

IOWA STATE UNIVERSITY
OF SCIENCE AND TECHNOLOGY

Institutional Review Board
Office for Responsible Research
Vice President for Research
1138 Pearson Hall
Ames, Iowa 50011-2207
515 294-4566
FAX 515 294-4267

Date: 9/24/2015

To: Andrew Seidman
W112 Lagomarcino Hall

CC: Dr. Nathaniel Wade
W112 Lagomarcino
Dr. David Vogel
W112 Lagomarcino Hall

From: Office for Responsible Research

Title: Opinions of Mental Health Care

IRB ID: 15-141

Approval Date: 9/23/2015 **Date for Continuing Review:** 3/9/2017

Submission Type: Modification **Review Type:** Expedited

The project referenced above has received approval from the Institutional Review Board (IRB) at Iowa State University according to the dates shown above. Please refer to the IRB ID number shown above in all correspondence regarding this study.

To ensure compliance with federal regulations (45 CFR 46 & 21 CFR 56), please be sure to:

- **Use only the approved study materials** in your research, **including the recruitment materials and informed consent documents that have the IRB approval stamp**.
- **Retain signed informed consent documents for 3 years after the close of the study**, when documented consent is required.
- **Obtain IRB approval prior to implementing any changes** to the study by submitting a Modification Form for Non-Exempt Research or Amendment for Personnel Changes form, as necessary.
- **Immediately inform the IRB of** (1) **all serious and/or unexpected adverse experiences** involving risks to subjects or others; and (2) **any other unanticipated problems involving risks** to subjects or others.
- **Stop all research activity if IRB approval lapses**, unless continuation is necessary to prevent harm to research participants. Research activity can resume once IRB approval is reestablished.
- **Complete a new continuing review form** at least three to four weeks prior to the **date for continuing review** as noted above to provide sufficient time for the IRB to review and approve continuation of the study. We will send a courtesy reminder as this date approaches.

Please be aware that IRB approval means that you have met the requirements of federal regulations and ISU policies governing human subjects research. **Approval from other entities may also be needed.** For example, access to data from private records (e.g. student, medical, or employment records, etc.) that are protected by FERPA, HIPAA, or other confidentiality policies requires permission from the holders of those records. Similarly, for research conducted in institutions other than ISU (e.g., schools, other colleges or universities, medical facilities, companies, etc.), investigators must obtain permission from the institution(s) as required by their policies. **IRB approval in no way implies or guarantees that permission from these other entities will be granted.**

Upon completion of the project, please submit a Project Closure Form to the Office for Responsible Research, 1138 Pearson Hall, to officially close the project.

Please don't hesitate to contact us if you have questions or concerns at 515-294-4566 or IRB@iastate.edu.